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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/926,367	06/13/2002	Christian Marzolin	215140US0PCT	9256
22850	7590	04/04/2006	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.			CHEVALIER, ALICIA ANN	
1940 DUKE STREET			ART UNIT	
ALEXANDRIA, VA 22314			PAPER NUMBER	

1772

DATE MAILED: 04/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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**Office Action Summary**

Application No.

09/926,367

Applicant(s)

MARZOLIN ET AL.

Examiner

Alicia Chevalier

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --****Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 January 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2 and 4-64 is/are pending in the application.
- 4a) Of the above claim(s) 19-62 and 64 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 and 63 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **RESPONSE TO AMENDMENT**

### ***Request for Continued Examination***

1. The Request for Continued Examination (RCE) under 37 CFR 1.53 (d) filed on January 20, 2006 is acceptable and a RCE has been established. An action on the RCE follows.
2. Claims 1, 2 and 4-64 are pending in the application, claims 19-62 and 64 are withdrawn from consideration. Claim 3 has been cancelled.
3. Amendments to the claims, filed on January 20, 2006, have been entered in the above-identified application.

### ***REJECTIONS***

4. **The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.**

### ***Claim Rejections - 35 USC § 102***

5. Claims 1-4, 6-10, 15, 17, 18, 27-31 and 61-63 are rejected under 35 U.S.C. 102(e) as being anticipated by Huang et al. (U.S. Patent No. 6,352,758).

Regarding Applicant's claim 1, Huang discloses a substrate comprising a relief (*grooved layer, col. 4, lines 24-25 and figures 1-3*), wherein the relief consists of a low surface level and a high surface level (*figures 1-3*). The low surface level has a height not less than 1/10 of the dimensions of a plurality of motifs forming the high surface level, since the references discloses in figure 3 that the height of the motifs is 5  $\mu\text{m}$  and the width of the projection is 4  $\mu\text{m}$  and the

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spacing between motifs is 4  $\mu\text{m}$ , also see col. 8, lines 49-62. The dimensions are in the region of a micrometer, the height ranges between 0.1 and 10 micrometers (*col. 8, line 52 and figure 3*) and the high surface level represents 1 to 65% of a surface of the substrate (*59% based on figure 3*).

Regarding Applicant's claim 2, Huang discloses that the substrate is hydrophobic/oleophobic and further comprises an agent of a silicone, such as  $\text{SiO}_2$  (*col. 5, line 10*).

Regarding Applicant's claim 3, Huang discloses that the substrate is hydrophilic/oleophilic (*col. 2, line 65*).

Regarding Applicant's claims 4 and 61, Huang discloses that the height ranges between 0.1 and 2 micrometers and between 1 and 10 micrometers (*col. 8, line 52*).

Regarding Applicant's claim 6, Huang discloses that the geometry of the relief displays a periodicity (*figure 1*).

Regarding Applicant's claim 7, Huang discloses that the low surface level and the high surface level are connect to one another by means of at least one partition approximately perpendicular to a plane of the substrate (*figures 2 and 3*).

Regarding Applicant's claim 8, Huang discloses that the high surface level displays a continuity in at least one direction of a plane of the substrate (*figures 1-3*).

Regarding Applicant's claim 9, Huang discloses that the relief comprises a multiplicity of approximately identical parallelepipedal objects, the parallelepipedal objects parallel and uniformly spaced (*col. 9, lines 12-15 and figure 1*).

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Regarding Applicant's claim 10, Huang discloses that the surface level does not display continuity in any direction of a plane of the substrate, since the reference discloses that the grooves can be irregularly shaped (*col. 9, line 1215*).

Regarding Applicant's claim 15, Huang discloses that the relief is based on at least one compound of at least one of the elements selected from the group consisting of Si, W Sb, Ti, Zr, Ta, V, Pb, Mg, Al, Mn, Co, Ni, Sn, Zn, In, a plastic and a plastic containing a filler, the compound optionally hardened by means of application of an energy source, or a thermoplastic, and wherein at least one underlying portion of the substrate is composed of a glass, a plastic or combination thereof (*col. 4, line 49 through col. 5, line 20*).

Regarding Applicant's claim 17, Huang discloses that the substrate has anti-reflecting properties, since the coating significantly reduces light intensity (*col. 9, lines 12-29*).

Regarding Applicant's claim 18, Huang discloses that the substrate has anti-staining properties (*col. 3, line 53*).

Regarding Applicant's claims 27 and 63, Huang's patterned article is deemed to be a glazing since it meets all the limitations of claim 1.

Regarding Applicant's claims 28-31, Huang discloses that the glazing can be added to a building or street furnishing; an air, marine or land transportation vehicle; screen, lamp or electronic display; furnishing or household electrical appliance (*col. 8, line 63 through col. 9, line 1 and col. 3, lines 44-54*).

Regarding Applicant's claim 62, Huang discloses that the furnishing or household electrical appliance is a refrigerator, a self, a shower partition, a refrigerator door, an oven door, a display case or a vitreous ceramic plate (*freezer door, col. 8, line 67*).

***Claim Rejections - 35 USC § 103***

6. Claims 5, 11-14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huang.

Huang is relied upon as described above.

Huang fails to disclose the claimed different relief shapes.

Since Applicant has not shown any criticality to the different relief shapes, it would have been an obvious matter of design choice to change the shape of the relief, since a modification would have involved a mere change in shape of the relief. A change in size or shape is generally recognized as being within the level of ordinary skill in the art, absent unexpected results. MPEP 2144.04 (I) and (IV).

***ANSWERS TO APPLICANT'S ARGUMENTS***

7. Applicant's arguments in response January 20, 2006 regarding the previous rejections of record have been carefully considered but are deemed unpersuasive.

Applicant argues that the concept of Hung is different than the current inventions concept. Specifically, Applicant's substrate improves the flow of drops and Hung does not.

In response to Applicant's argument that Hung does not include certain features of Applicant's invention, the limitations on which the Applicant relies (i.e. improve flow of drops) are not stated in the claims. It is the claims that define the claimed invention, and it is claims, not specifications that are anticipated or unpatentable.

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***Conclusion***


8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia Chevalier whose telephone number is (571) 272-1490.

The examiner can normally be reached on Monday through Friday from 8:00 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached on (571) 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ac  
4/3/06

  
ALICIA CHEVALIER  
PRIMARY EXAMINER